

Appl. No. 10/654,989
Amendment dated: April 13, 2006
Reply to OA of: December 14, 2005

REMARKS

This is in response to the Official Action of December 14, 2005. Applicants have amended the claims of the instant application in order to more precisely define the scope of the present invention, taking into consideration the outstanding Official Action.

To begin with, Applicants note the objection to the Specification set forth in the Official Action. Specifically, the Official Action urges that the Specification contains errors in grammar such as "implantable dental integrality". In light of this objection, Applicants submit herewith a Substitute Specification. The Substitute Specification is an attempt to correct any grammatical errors contained in the originally filed Specification, including those identified in the outstanding Official Action, and introduces no new matter. In light of this submission, Applicants respectfully request that the objection to the Specification be withdrawn.

With respect to the amendments to the claims, Applicants note that independent claims 1, 4 and 7 have been amended to recite additional features. First, claims 1, 4 and 7 now recite that only the abutment portion is inserted into a restoration tooth. This amendment is clearly supported by the Specification as originally filed, including, e.g., Figures 8, 10, 12, 14, 16 and 18. Secondly, claims 1, 4 and 7 have been amended to recite that the outside circumference of the conical portion or surface gets smaller from the bottom of the conical portion or surface to the top of the conical portion or surface. This amendment is clearly supported throughout the Specification as originally filed, including, e.g., Figures 8, 10, 12, 14, 16 and 18.

Applicants have also made additional amendments to the claims which correct minor grammatical, translation and/or typographical errors occurring in the original claims. Applicants respectfully submit that none of these amendments present new matter into the application.

Finally, Applicants note new claim 10, which depends from claim 1. New claim 10 recites that the abutment portion, the conical portion and the implantation portion are formed integrally. Support for this amendment may be found throughout the Specification as originally filed.

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Applicants respectfully submit that all claims now pending in the instant application are in full compliance with the requirements of 35 U.S.C. §112 and are clearly patentable over the references of record.

The rejection of claims 1, 2, 4, 5, 7 and 8 under 35 U.S.C. §102(b) as being anticipated by Callan (US Pat. No. 5,931,675) has been carefully considered but is most respectfully traversed in light of the amendments to the claims and the following comments.

Applicants wish to direct the Examiner's attention to MPEP § 2131 which states that to anticipate a claim, the reference must teach every element of the claim.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed Cir. 1989). The elements must be arranged as required by the claim, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed.Cir. 1990).

The Official Action urges that Callan discloses an abutment portion 40, an implant body portion 20 and a conical portion 36. The Official Action urges that the implant portion may have threads 28, the abutment 40 may have a lower portion 41 that is fastened to the implant body and threads, and the implant body may have an axial hole as shown in Figure 7. Applicants traverse this rejection because the Callan reference clearly fails to disclose every element of the presently amended claims.

As discussed in detail above, each of the independent claims have been amended to recite two additional features. With respect to the first new feature, each of the independent claims now recite that only the abutment portion is inserted into the restoration tooth. This is clearly illustrated in, e.g., Figure 8. Figure 8 shows the abutment portion 41 inserted into the restoration tooth T, while the conical portion 43

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and the implantation portion 42 are implanted into the gum K and bone socket I. No portion of the conical portion or implantation portion are inserted into the restoration tooth T because the conical portion and the implantation portion are completely implanted into the gum.

To the contrary, the dental prosthesis disclosed in Callan clearly comprises an abutment portion 40 and a conical portion 36 that is inserted into the restoration tooth 60. This feature of the invention is neatly summarized at col. 1, lines 11-17 of the Callan reference, which states "[t]he present invention relates... to a dental prosthesis including an implant, an abutment which is attached to the implant, and a crown which is attached to both the abutment and the implant such that the joint defined between the abutment and the implant is covered and affectively [sic] sealed by the prosthetic margin of the crown". Accordingly, Applicants submit that Callan clearly fails to disclose an artificial implantable dental device where only the abutment portion is inserted into the restoration in tooth, as claimed in the present application. In light of this, Applicants respectfully submit that Callan fails to properly support a §102(b) rejection according to the guidelines set forth in MPEP §2131 and therefore this rejection should be withdrawn.

As Applicants now believe that they have shown independent claims 1, 4 and 7 to be clearly patentable over the references of record, Applicants also respectfully submit that all claims depending therefrom are also allowable. Accordingly, it is respectfully requested that the rejection of the dependent claims over Callan also be withdrawn.

The rejection of claim 1 under 35 U.S.C. §102(b) as being anticipated by Hamada et al. (US Pat. No. 5,863,200) has been carefully considered but is most respectfully traversed in light of the amendments to the claims and the following comments.

The Official Action urges that Hamada discloses an abutment portion 2d and 4, an implantation portion 1 and a conical portion 2a. Applicants traverse this rejection because the Hamada reference clearly fails to disclose every element of the presently amended claims.

Applicants note that the second feature added to each of the independent claims

recites that the outside circumference of the conical portion or surface gets smaller from the bottom of the conical portion or surface to the top of the conical portion or surface. This feature is clearly illustrated in, e.g., Figure 8. As shown in Figure 8, the outside circumference of the conical surface gets smaller from the bottom of the conical portion to the top of the conical portion. This configuration in turn assures that angle β_1 formed between the conical portion 43 and the surface of the gum K is an acute angle. As explained in the Specification, acute angle β_1 prevents food particles from depositing between the implantation portion and the gums, and thereby reduces the risk of gum inflammation and implantation failure.

To the contrary, Hamada clearly fails to disclose this feature. The circumference of the conical portion 2a of the dental implant disclosed in Hamada gets larger from the bottom of the conical portion to the top of the conical portion. Because the conical section 2a illustrated in Figure 13 gradually gets wider than the implantation portion, the angle formed between the surface of the gum and the conical section is an obtuse angle. Accordingly, Applicants respectfully submit that Hamada suffers from the problems that the present invention is designed to avoid, namely gum inflammation and implantation failure. Ultimately, Hamada clearly fails to disclose an artificial implantable dental device where the circumference of the conical portion gets smaller from the bottom of the conical portion to the top of the conical portion, as claimed in the instant application. In light of this, Applicants respectfully submit that Hamada fails to properly support a §102(b) rejection according to the guidelines set forth in MPEP §2131 and therefore this rejection should be withdrawn.

The rejection of claim 2 under 35 U.S.C. §103(a) as being unpatentable over Hamada in view of Gersberg (US Pat. No. 5,195,892), the rejection of claim 3 under 35 U.S.C. §103(a) as being unpatentable over Hamada in view of Morgan et al. (US Pat. No. 6,227,857), the rejection of claims 4 and 7 under 35 U.S.C. §103(a) as being unpatentable over Hamada in view of Riess (US Pat. No. 4,215,986), the rejection of claims 5 and 8 under 35 U.S.C. §103(a) as being unpatentable over Hamada in view of Riess and Gersberg and the rejection of claim 9 under 35 U.S.C. §103(a) as being

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unpatentable over Hamada in view of Riess and Morgan have each been carefully considered but are most respectfully traversed in light of the amendments to the claims and the following comments.

The Official Action acknowledges that each of the §103(a) rejections are based on the §102 rejection of claims 1, 2, 4, 5, 7 and 8 as being anticipated by Hamada. However, as described in detail above, the Hamada reference clearly fails to disclose every feature of the presently amended claims. Specifically, Hamada fails to disclose that the outside circumference of the conical surface gets smaller from the bottom of the conical surface to the top of the conical surface.

Further, Applicants respectfully submit that none of the secondary references cited in the Official Action overcome the deficiencies identified above with respect to Hamada. Accordingly, Applicants respectfully submit that none of the prior art references, either standing alone or in combination, disclose or suggest each of the elements of the presently amended claims. Therefore, Applicants respectfully assert that a proper §103(a) rejection according to the guidelines set forth in MPEP §2143 has not been established and the obviousness rejection of the claims should be withdrawn.

In view of the above comments and further amendments to the claims, favorable reconsideration and allowance of all of the claims now present in the application are most respectfully requested.

Respectfully submitted,
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